

**WHAT IS CLAIMED IS:**

1. A method for forecasting product demand for a plurality of products, said method comprising the steps of:

- storing within a data warehouse historical weekly sales data for said plurality of products;
- defining a plurality of seasonal models, each one of said seasonal models modeling an annual sales pattern for a group of products associated with said one of said seasonal models;
- comparing the historical weekly sales data for one of said plurality of products with each one of said seasonal models to determine a best match between said one of said plurality of products and said seasonal models; and
- associating said one of said plurality of products with the seasonal model determined to provide the best match with said one of said plurality of products.

2. The method for forecasting product demand for a plurality of products in accordance with claim 1, wherein:

each one of said seasonal models comprises a series of weekly product group seasonal factors, each one of said weekly product group seasonal factors representing a ratio between:

- a total historical sales volume for all products in the group of products represented by said one of said seasonal models during a one week period; and
- an average weekly sales volume for all products in the group of products represented by said one of said seasonal models, said average weekly sales volume being determined over a period of fifty-two consecutive weeks.

3. The method for forecasting product demand for a plurality of products in accordance with claim 2, wherein said step of comparing the historical weekly sales data for one of said plurality of products with each one of said seasonal models to determine a best match between said one of said plurality of products and said seasonal models includes the steps of:

calculating a series of weekly product seasonal factor for said one of said plurality of products, each one of said seasonal models comprises a series of weekly seasonal factors, each one of said weekly product seasonal factors representing a ratio between:

a historical sales volume for said one of said plurality of products during a one week period; and

an average weekly sales volume for said one of said plurality of products determined over a period of at least fifty-two consecutive weeks; and

comparing said weekly product seasonal factors for said one of said plurality of products with the weekly product group seasonal factors for said seasonal models for corresponding weeks to determine a best match between said one of said plurality of products and said seasonal models.

4. A system for forecasting product demand for a plurality of products comprising

a database of historical weekly demand data for a plurality of products;

a plurality of seasonal models, each one of said seasonal models modeling an annual sales pattern for a group of products associated with said one of said seasonal models; and

means for comparing the historical weekly sales data for one of said plurality of products with each one of said seasonal models to determine a best match between said one of said plurality of products and said seasonal models and

associating said one of said plurality of products with the seasonal model determined to provide the best match with said one of said plurality of products.

5           5.       The system for forecasting product demand for a plurality of products in accordance with claim 4, wherein:

              each one of said seasonal models comprises a series of weekly product group seasonal factors, each one of said weekly product group seasonal factors representing a ratio between:

              a total historical sales volume for all products in the group of products  
10       represented by said one of said seasonal models during a one week period; and  
              an average weekly sales volume for all products in the group of products represented by said one of said seasonal models, said average weekly sales volume being determined over a period of fifty-two consecutive weeks.

15           6.       The system for forecasting product demand for a plurality of products in accordance with claim 5, wherein said means for comparing the historical weekly sales data for one of said plurality of products with each one of said seasonal models to determine a best match between said one of said plurality of products and said seasonal models performs the steps of:

20           calculating a series of weekly product seasonal factor for said one of said plurality of products, each one of said seasonal models comprises a series of weekly seasonal factors, each one of said weekly product seasonal factors representing a ratio between:

              a historical sales volume for said one of said plurality of products during a  
25       one week period; and

              an average weekly sales volume for said one of said plurality of products determined over a period of at least fifty-two consecutive weeks; and

comparing said weekly product seasonal factors for said one of said plurality of products with the weekly product group seasonal factors for said seasonal models for corresponding weeks to determine a best match between said one of said plurality of products and said seasonal models.

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